

### REMARKS

An adverse judgment was entered against Applicants by the Board of Patent Appeals and Interferences in view of prior art submitted by Applicants, which affected claims 1 – 4, 6 – 10, 15 and 24 – 31. The claims which did not correspond to the count, claims 12, 13 and 16 – 21 remain in this application, and have been indicated as allowable.

With this paper, Applicants wish to add claims directed to a more particular aspect of the present invention, which are deemed to be patentable over the art and are believed to not correspond to the count in the interference.

In principle, the Mundt abstracts/poster submitted to the Board disclosed the construction of the IBDV mutant that is also described in Example 1, page 15 and Figure 2 of the present application (see Figure 1 of the poster). This VP5 mutant fails to express the VP5 protein as a result of the substitution of one nucleotide of the start codon of the VP5 gene (see last sentence of page 15, the description of Figure 2 and Figure 2 itself: a “T” is substituted by a “G”).

However, the present inventors found out that this (prior art) VP5 mutant has a disadvantage over mutants that comprise two or more mutations in the VP5 gene. If the prior art mutant is serially passed in cell culture, the mutation is reversed and the wild-type VP5 genotype and phenotype is obtained again. As the VP5 phenotype is linked to reduced virulence, this phenotype reversion of the mutation is not desirable for vaccine compositions. The more preferred IBDV mutant would be that mutant which would be less likely to revert, and thus safest in a vaccine.

This undesirable reversion is not observed with the second VP5 mutant described in the patent application: IBDV VP5-2 (Example 1, page 17; Figure 3 and the description of Figure 3). In this mutant, the three nucleotides of the start codon are substituted, in

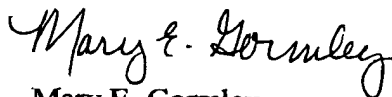
addition to further substitutions in two downstream codons, which results in the generation of two stop codons. In total, this second mutant has three stop codons in the 5'-end of the VP5 gene, one in each reading frame.

Serial passaging of this second mutant does not result in a reversion to virulence of the IBDV mutant, and thus displays properties which are advantageous over the prior art mutant. The prior art documents do not disclose the feature that the IBDV mutant is susceptible to reversion, but that information can be provided by Applicants, if necessary.

Support for the new claims can be found in the specification on page 6, lines 10 – 31, and in particular lines 23 – 29.

Favorable consideration is courteously requested.

Respectfully submitted,



Mary E. Gormley  
Attorney for Applicants  
Registration No. 34,409

Akzo Nobel Patent Dept.  
1300 Piccard Drive  
Suite 206  
Rockville, Maryland 20850  
Tel: (301) 948-7400  
Fax: (301) 948-9751

MEG:mg